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EXAMINER

RUSSELL, WANDA Z

ART UNIT	PAPER NUMBER
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2616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/754,544

Applicant(s)

ABERT, MICHAEL

Examiner

Wanda Z. Russell

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Riceman (U.S. Patent 6,760,779 B1), in view of Kawasaki et al. (U.S. Patent 5,463,329).

For **claim 1**, Riceman substantially teaches a method for transmitting data via a data transmission unit between data processing units of a data processing system (Fig. 1 & 2. Note that Fig. 2 is detailed one end of Fig. 1),

transmitting the data in parallel in at least a first protocol and a second protocol (parallel transmission of data over a communication line/medium/network, refer to col. 3, line 29-31; and the system herein can be used to transmit and/or receive data via a computer, television, telecommunications network, digital network, facsimile machine, video telephone or other similar device, system or networks either by utilization of direct (hard wired) and/or broadcast (wireless) systems, refer to col. 3, lines 41-46. They are different protocols);

based on the first protocol, transmitting first data (refer to col. 3, lines 58-60) of the data in a first frequency range with a first signal sequence (instead of being sent to one signal generator capable of generating multiple signals of varying frequency for

each data streams/segments. Alternatively, the aforesaid data streams/segments could be processed separately or sequentially by one or more multi-frequency signal generator(s), refer to col. 4, lines 27-32); and

based on the second protocol, transmitting second data (refer to col. 3, lines 60-61) of the data in a second frequency range with a second signal sequence (instead of being sent to one signal generator capable of generating multiple signals of varying frequency for each data streams/segments. Alternatively, the aforesaid data streams/segments could be processed separately or sequentially by one or more multi-frequency signal generator(s), refer to col. 4, lines 27-32);

However, Riceman fails to specifically teach a first signal level and a second signal level wherein a first switching level of the first protocol differs from a second switching level of the second protocol.

Kawasaki et al. teach a first signal level and a second signal level wherein a first switching level of the first protocol differs from a second switching level of the second protocol (refer to Fig. 4, and note that it is for input voltage. It can be used for the 12-Fig. 2 by Riceman).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Riceman with Kawasaki et al. to obtain the invention as specified, for faster and more secure data transmission.

For **claim 2**, Riceman and Kawasaki et al. teach everything claimed as applied above (see claim 1). In addition, Riceman teaches the method as claimed in claim 1, wherein the first data of the first protocol is transmitted asynchronously (it is the first

one, therefore it is asynchronously), together with an acknowledgment signal (handshake, refer to col. 5, line 57 & lines 51-58).

For **claim 3**, Riceman and Kawasaki et al. teach everything claimed as applied above (see claim 1). In addition, Riceman teaches the method as claimed in claim 1, wherein the second data of the second protocol is transmitted synchronously (at the same time, refer to col. 6, lines 1-2), together with an acknowledgment signal (handshake, refer to col. 5, line 57 & lines 51-58).

For **claim 4**, Riceman and Kawasaki et al. teach everything claimed as applied above (see claim 1). In addition, Riceman teaches the method as claimed in claim 1, wherein the second data of the second protocol is provided with security data (refer to col. 1, lines 35-37).

For **claim 7**, Riceman and Kawasaki et al. teach everything claimed as applied above (see claim 1). However, Riceman fails to specifically teach the method as claimed in claim 1, wherein the first switching level is assigned to a first driver that is provided for the first protocol, and wherein the first switching level is symmetrical about an H-level of a second driver that is provided for the second protocol.

Kawasaki et al. teach the method as claimed in claim 1, wherein the first switching level is assigned to a first driver that is provided for the first protocol, and wherein the first switching level is symmetrical about an H-level of a second driver that is provided for the second protocol (refer to Fig. 4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Riceman with Kawasaki et al. to obtain the invention as specified, for faster and more secure data transmission.

For **claim 8**, Riceman and Kawasaki et al. teach everything claimed as applied above (see claim 1). However, Riceman fails to specifically teach the method as claimed in claim 7, wherein the first switching level assigned to the first driver for the first protocol is 2.5 V, wherein an H-level of the first driver is 5 V, and wherein an L-level of the first driver is 0 V.

Kawasaki et al. teach the method as claimed in claim 7, wherein the first switching level assigned to the first driver for the first protocol is 2.5 V, wherein an H-level of the first driver is 5 V, and wherein an L-level of the first driver is 0 V (refer to Fig. 4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Riceman with Kawasaki et al. to obtain the invention as specified, for faster and more secure data transmission.

For **claim 9**, Riceman and Kawasaki et al. teach everything claimed as applied above (see claim 1). However, Riceman fails to specifically teach the method as claimed in claim 7, wherein the second switching level is assigned to the second driver, wherein the second switching level for the second protocol is 5 V, wherein the H-level of the second driver is 6 V, and wherein an L-level of the second driver is 4 V.

Kawasaki et al. teach the method as claimed in claim 7, wherein the second switching level is assigned to the second driver, wherein the second switching level for

the second protocol is 5 V, wherein the H-level of the second driver is 6 V, and wherein an L-level of the second driver is 4 V (refer to Fig. 4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Riceman with Kawasaki et al. to obtain the invention as specified, for faster and more secure data transmission.

For **claim 10**, it is a system claim corresponding to method claim 1, therefore it is rejected for the same reason above.

3. **Claims 5 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Riceman (U.S. Patent 6,760,779 B1), in view of Kawasaki et al. (U.S. Patent 5,463,329), and Martin et al. (U.S. Patent 5,504,873).

For **claim 5**, Riceman and Kawasaki et al. teach everything claimed as applied above (see claim 1). However, they fail to specifically teach the method as claimed in claim 1, wherein the first data of the first protocol is transmitted at a transmission rate of approximately 20 mbps.

Martin et al. teach the method as claimed in claim 1, wherein the first data of the first protocol is transmitted at a transmission rate of approximately 20 mbps (refer to col. 15, lines 7-8. Up to 640 mbps includes 20 mbps. For DCM, refer to col. 7, line 20).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Riceman with Kawasaki et al., and Martin et al. to obtain the invention as specified, for more detailed control of the data transmission.

For **claim 6**, Riceman and Kawasaki et al. teach everything claimed as applied above (see claim 1). However, they fail to specifically teach the method as claimed in claim 1, wherein the second data of the second protocol is transmitted at a transmission rate of approximately 640 mbps.

Martin et al. teach the method as claimed in claim 1, wherein the second data of the second protocol is transmitted at a transmission rate of approximately 640 mbps (refer to col. 15, lines 7-8).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Riceman with Kawasaki et al., and Martin et al. to obtain the invention as specified, for more detailed control of the data transmission.

Response to Arguments

4. Applicant's arguments with respect to claim(s) 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda Z. Russell whose telephone number is (571) 270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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